

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A schema for storing meta data that describes at least one relational database comprising:
 - at least one abstract class for defining at least one data type of at least one member, said abstract class including:
 - at least one property for indicating at least one generic Structured Query Language data type for said member;
 - at least one property for indicating at least one database-specific data type name for said member; and
 - at least one method for constructing at least one object instantiated from at least one class derived from said abstract class.
2. The schema of claim 1, wherein said abstract class is a first abstract class, further comprising a second abstract class for describing a user defined data type, said second abstract class derived from said first abstract class, said second abstract class including:
 - at least one property for indicating whether an object of at least one class derived from said second abstract class is instantiable; and
 - at least one property for indicating whether said class derived from said second abstract class is final.
3. The schema of claim 1 wherein said abstract class further comprises at least one property for indicating at least one default value for said type of said member.
4. The schema of claim 1 further comprising at least one property for indicating at least one mapping of said database-specific data type name to at least one Java Database Connectivity data type.
5. The schema of claim 1 where said schema is described using the Unified Modeling Language.

6. A serialized stream of meta data in the Extensible Markup Language Meta data Interchange (XMI) format where said meta data is stored according to the schema of claim 1.

7. A storage system in at least one database catalog comprising:
at least one object of at least one class derived from at least one abstract class for defining at least one data type of at least one member, said abstract class including:

at least one property for indicating at least one generic Structured Query Language data type for said member;

at least one property for indicating at least one database-specific data type name for said member; and

at least one method for constructing at least one object instantiated from at least one class derived from said abstract class.

8. A database catalog with meta data stored in at least one storage system that is an implementation of the schema of claim 1.

9. A tool for creating and editing databases including means for storing meta data in a storage system that is an implementation of the schema of claim 1.

10. A method for creating at least one database comprising storing meta data relating to the database in at least one meta data store according to the schema of claim 1.

11. An object-oriented description of at least one relational database comprising:
at least one object for describing at least one type of at least one member in said relational database, said object instantiated from at least one class derived from at least one abstract class for defining at least one data type of at least one member, said abstract class including:

at least one property for indicating at least one generic Structured Query Language data type for said member;

at least one property for indicating at least one database-specific data type name for said member;

at least one method for constructing at least one object instantiated from at least one class derived from said abstract class.

12. A computer readable medium containing at least one object-oriented description of a relational database, said object-oriented description comprising:
 - at least one object for describing a type of a member in said relational database, said object instantiated from a class derived from at least one abstract class for defining a data type of a member, said abstract class including:
 - a property for indicating a generic Structured Query Language data type for said member;
 - a property for indicating a database-specific data type name for said member; and
 - a method for constructing at least one object instantiated from a class derived from said abstract class.
13. A schema for storing meta data that describes a relational database comprising at least one abstract class for naming groups of members in said relational database, said abstract class having a property for naming said group of said members.
14. An object-oriented description of a relational database comprising at least one object for referencing a group of members in said relational database, said object instantiated from a class derived from at least one abstract class for naming groups of members in said relational database, said abstract class having a property for naming said groups of said members.
15. A computer readable medium containing at least one object-oriented description of a relational database, said object-oriented description comprising: at

least one object for referencing a group of members in said relational database, said object instantiated from a class derived from at least one abstract class for naming groups of members in said relational database, said abstract class having a property for naming said group of said members.

16. A method of facilitating sharing of relational database types comprising:
transforming a first representation of database meta data into a second representation of said database meta data, where said second representation of said database meta data follows a given schema; and
storing said first representation in a repository in the form of a set of objects of classes defined in said given schema.
17. The method of claim 16 where said schema is a Unified Modeling Language schema.
18. A computer system comprising:
means for transforming a first representation of database meta data into a second representation of said database meta data, where said second representation of said database meta data follows a given schema; and
means for storing said first representation in a repository in the form of a set of objects of classes defined in said given schema.
19. A computer system operable to:
transform a first representation of database meta data into a second representation of said database meta data, where said second representation of said database meta data follows a given schema; and
store said first representation in a repository in the form of a set of objects of classes defined in said given schema.
20. An object-oriented programming language implementation of a schema for storing meta data that describes a relational database comprising:

at least one abstract class for defining a data type of a member, said abstract class including:

a property for indicating a generic Structured Query Language data type for said member;

a property for indicating a database-specific data type name for said member; and

a method for constructing at least one object instantiated from a class derived from said abstract class.

21. A method for editing a database comprising reading meta data relating to the database from a meta data store according to the schema of claim 1.

22. A tool for editing databases including means for reading meta data from a storage system that is an implementation of the schema of claim 1.